

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A scheduling controller, comprising:  
a request receiving device means for receiving a plurality of processing requests according to request type;  
a start time calculating device means for calculating, according to a number of processing requests received by the request receiving device means and according to the types of the requests received, a scheduling start time relative to a predetermined scheduling end time; and  
a scheduling device means for scheduling processing requests received by the request receiving device means from the scheduling start time calculated by the start time calculating device means to the scheduling end time; and  
a storage device for storing the predetermined scheduling end time;  
wherein the start time calculating device calculates, according to the processing requests received by the request receiving device, a scheduling start time relative to the scheduling end time stored in the storage device.
2. (Currently Amended) A scheduling controller, comprising:  
request requests receiving means for receiving processing requests from a plurality of terminal stations, each of the processing request being a transmission band pass request and including a transmission request and a data length thereof;  
start time calculating means for calculating, according to the processing request received by the request receiving means, a scheduling start time relative to a predetermined scheduling end time;  
scheduling means for allocating processing requests, received by the request receiving means from the scheduling start time calculated by the start time calculating means to the scheduling end time, to time slots in a frame; and  
reporting means for reporting information of time slot allocation by the scheduling means to the terminal stations.

3. (Currently Amended) A scheduling controller comprising:  
request receiving means for receiving a plurality of processing requests;  
start time calculating means for calculating, according to a number of processing requests received by the request receiving means and types thereof, a scheduling start time relative to a predetermined scheduling end time;  
scheduling means for scheduling processing ~~request~~requests received by the request receiving means from the scheduling start time calculated by the start time calculating means to the scheduling end time; and  
storage means for storing the predetermined scheduling end time;  
wherein the start time calculating means calculates, according to the processing requests received by the request receiving means, a scheduling start time relative to the scheduling end time stored in the storage means.

4. (Currently Amended) A scheduling controller comprising:  
request receiving means for receiving a plurality of processing requests;  
start time calculating means for calculating, according to a number of processing requests received by the request receiving means and types thereof, a scheduling start time relative to a predetermined scheduling end time;  
scheduling means for scheduling processing ~~request~~requests received by the request receiving means from the scheduling start time calculated by the start time calculating means to the scheduling end time;  
processing time storage means for storing scheduling time determined beforehand for each of the processing requests;  
wherein the start time calculating means calculates a total time of scheduling time according to scheduling time corresponding to each processing request type stored in the processing time storage means and calculates, according to the processing requests received by the request receiving means, a scheduling start time relative to the scheduling processing end time.

5. (Currently Amended) A scheduling method, comprising the steps of:  
receiving a plurality of processing requests according to request type;

calculating, according to a number of processing requests received by the request receiving step and according to the types of requests received, a scheduling start time relative to a predetermined scheduling end time; ~~and~~

scheduling processing requests received by the request receiving step from the scheduling start time calculated by the start time calculating step to the scheduling end time; and

storing the predetermined scheduling end time;

wherein the calculating step calculates a scheduling start time relative to the stored predetermined scheduling end time.

6. (Previously Presented) A scheduling method, comprising the steps of:  
receiving processing requests from a plurality of terminal stations, each of the processing requests being a transmission band pass request and including a transmission request and a data length thereof;

calculating, according to the processing requests received by the request receiving step, a scheduling start time relative to a predetermined scheduling end time;

allocating processing requests, received by the request receiving step from the scheduling start time calculated by the start time calculating step to the scheduling end time, to time slots in a frame; and

reporting information of time slot allocation by the scheduling step to the terminal stations.

7. (Previously Presented) A scheduling controller in accordance with claim 2, further including storage means for storing the predetermined scheduling end time, wherein the start time calculating means calculates, according to the processing requests received by the request receiving means, a scheduling start time relative to the scheduling end time stored in the storage means.

8. (Previously Presented) A scheduling controller in accordance with claim 2, further including processing time storage means for storing scheduling time determined beforehand for each of the processing requests, wherein the start time calculating means calculates total time of scheduling time according to scheduling time corresponding to

each processing request type stored in the processing time storage means and calculates, according to the processing requests received by the request receiving means, a scheduling start time relative to the scheduling processing end time.

9. (Previously Presented) A scheduling controller in accordance with claim 3, further including processing time storage means for storing scheduling time determined beforehand for each of the processing requests, wherein the start time calculating means calculates total time of scheduling time according to scheduling time corresponding to each processing request type stored in the processing time storage means and calculates, according to the processing requests received by the request receiving means, a scheduling start time relative to the scheduling processing end time.

10. (Previously Presented) A scheduling controller in accordance with claim 2, wherein the start time calculating means calculates the scheduling start time according to the processing request received by the request receiving means and types thereof.

11. (Previously Presented) A scheduling method according to claim 6, wherein calculating the scheduling start time includes calculating according to the processing request received by the request receiving means and types thereof.

12. (New) A scheduling controller, comprising:  
a requests receiving device for receiving processing requests from a plurality of terminal stations, each of the processing request being a transmission band pass request and including a transmission request and a data length thereof;  
a start time calculating device for calculating, according to the processing request received by the request receiving device, a scheduling start time relative to a predetermined scheduling end time;  
a scheduling device for allocating processing requests, received by the request receiving device from the scheduling start time calculated by the start time calculating device to the scheduling end time, to time slots in a frame; and

a reporting device for reporting information of time slot allocation by the scheduling device to the terminal stations.

13. (New) A scheduling controller comprising:

a request receiving device for receiving a plurality of processing requests;

a start time calculating device for calculating, according to a number of processing requests received by the request receiving device and types thereof, a scheduling start time relative to a predetermined scheduling end time;

a scheduling device for scheduling processing requests received by the request receiving device from the scheduling start time calculated by the start time calculating device to the scheduling end time;

a processing time storage device for storing scheduling time determined beforehand for each of the processing requests;

wherein the start time calculating device calculates a total time of scheduling time according to scheduling time corresponding to each processing request type stored in the processing time storage device and calculates, according to the processing requests received by the request receiving device, a scheduling start time relative to the scheduling processing end time.